# Borg Backup

(a fork of Attic-Backup)

"I found the Holy Grail of backups."

(Stavros K. about Attic-Backup, 8/2013)

35c3 presentation by Thomas Waldmann

(presented by Manuel Riel)

# **Borg Backup - Features**

- cli backup tool, separate GUIs
- good arch / platform / fs support
- deduplication (content-defined chunking / hash-id)
- compression (lz4, zstd, zlib, lzma)
- auth. encryption (AES256 + hmac/blake2)
- read from locally mounted fs
- store to local fs or to remote borg
- FUSE-mount backup archives

# Borg Backup - remote backup

### Own server with ssh and free space:

install borg, configure, done!

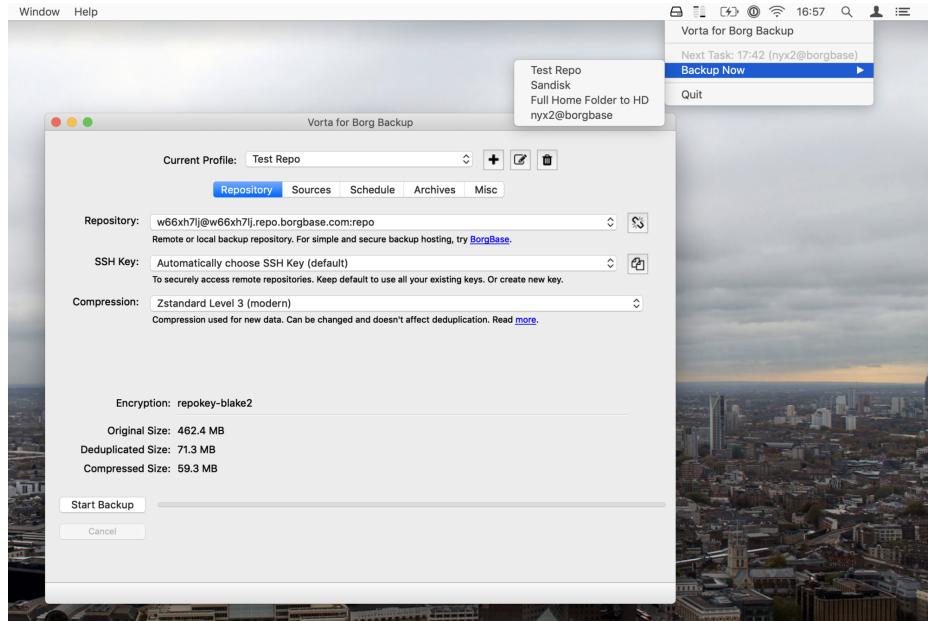
### No own remote server? No problem:

- rsync.net (ssh, cli)
- hetzner's storage box
- borgbase.com (ssh, web, easy)
- mutual backups "nerd-to-nerd"
- local repo + rclone to cloud

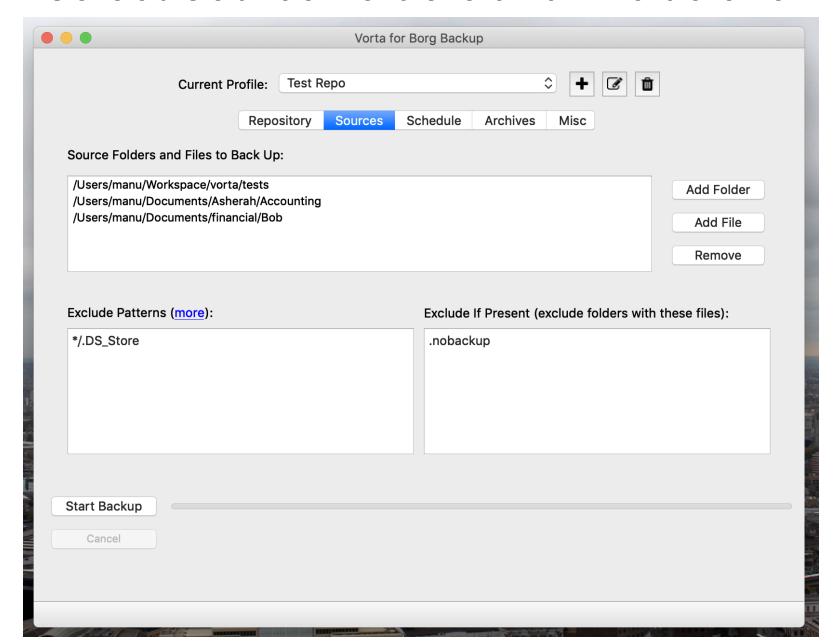
# Borg Backup - GUIs, Tools

- Vorta a GUI for borg
  - Python 3.6+, Qt, Linux or macOS, GPL v3
  - assimilate less nerdy friends with this!
  - (show screenshots)
- borgmatic define borg jobs by config file
- For more tools, see:
  - github: borgbackup/community
  - and please add your borg stuff there!

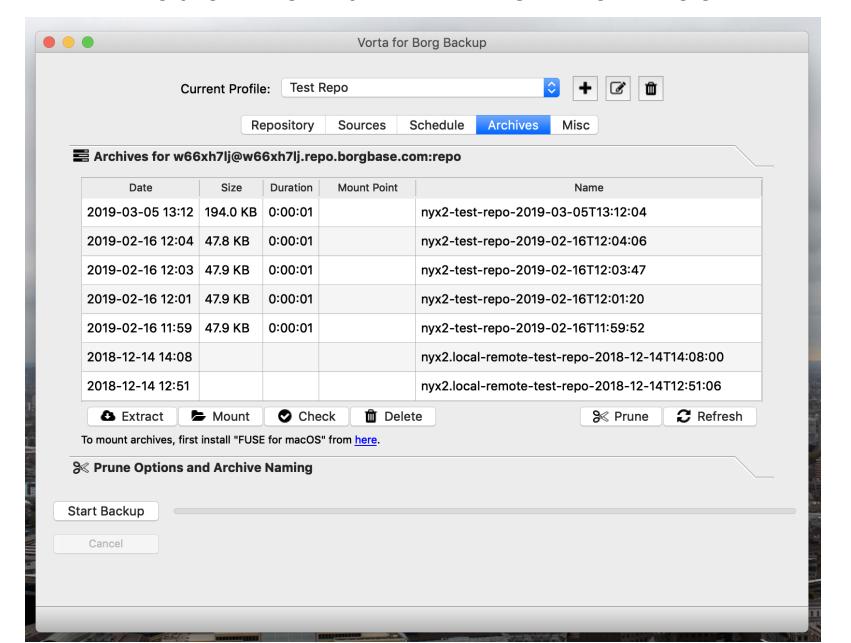
### System Tray and Main Window



#### **Select Source Folders and Exclusions**



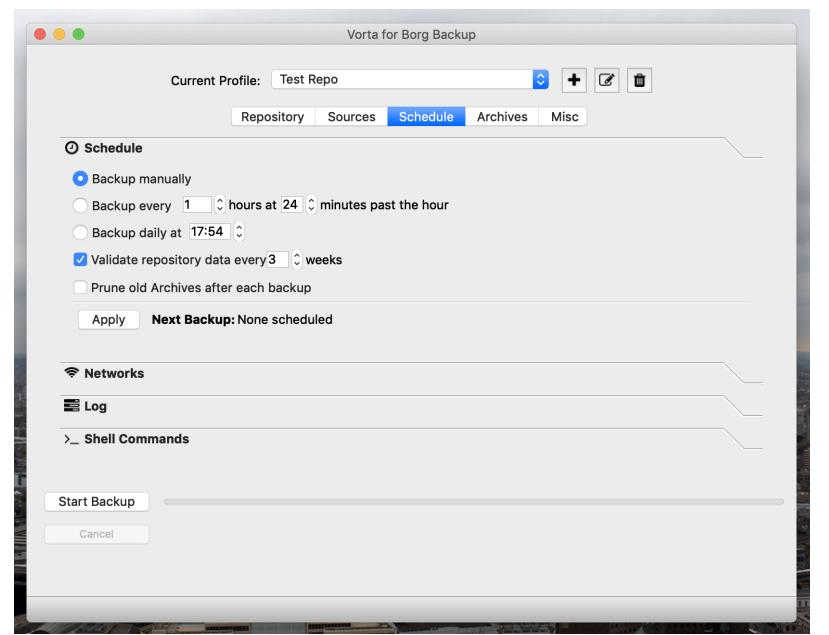
#### **List of Point-In-Time Archives**



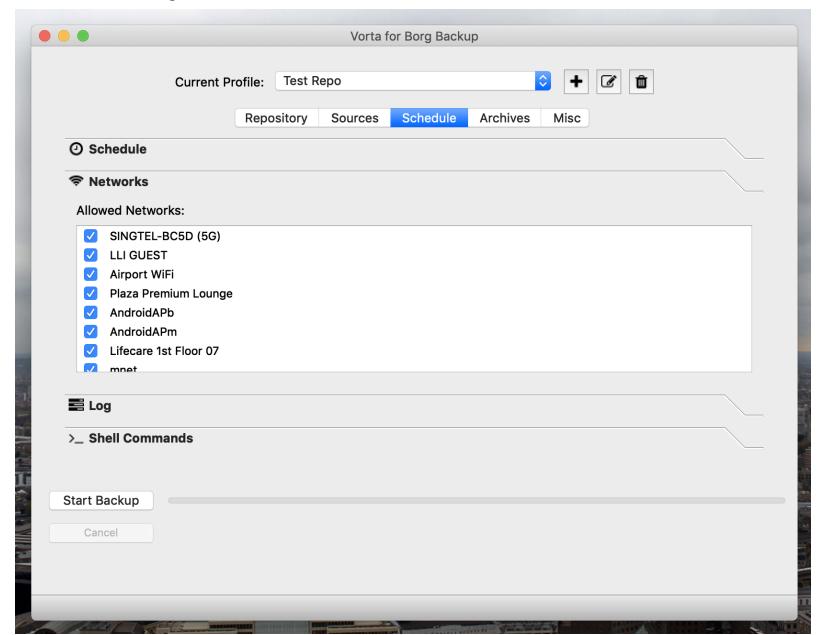
#### **Restore Individual Files and Folders**

| Name        |                  | Modified                 | Size   |
|-------------|------------------|--------------------------|--------|
| ▼ Users     |                  |                          |        |
| ▼           |                  |                          |        |
| ▼ Workspace |                  |                          |        |
| ▼  vorta    |                  |                          |        |
| ▼  tests    |                  | Mon, 2019-03-04 22:51:50 |        |
| ▶pyc        | ache             | Mon, 2019-03-04 22:53:43 |        |
| init_       |                  | Wed, 2019-02-20 17:28:55 |        |
| -           | _json_output     | Wed, 2019-02-20 17:28:55 |        |
|             | archives.py      | Wed, 2019-02-20 17:28:55 |        |
| _           | porg.py          | Wed, 2019-02-20 17:28:55 |        |
| ✓ test_r    | notifications.py | Wed, 2019-02-20 17:28:55 |        |
|             | repo.py          | Wed, 2019-02-20 17:28:55 |        |
|             | schedule.py      | Wed, 2019-02-20 17:28:55 |        |
|             | scheduler.py     | Wed, 2019-02-20 17:28:55 |        |
| test_s      | source.py        | Wed, 2019-02-20 17:28:55 |        |
|             | utils.py         | Wed, 2019-02-20 17:28:55 |        |
| conft       | est.py           | Mon, 2019-03-04 22:51:50 | 1.5 KB |
| Documents   |                  |                          |        |
|             |                  |                          |        |

### **Backup Schedule**



### Only Backup on Selected WiFis



# Borg Backup - Project

- community project
- FOSS (BSD license)
- Python 3.4+ (master: 3.5+)
- for speed: a little Cython & C
- good docs (for users, devs)
- good test coverage, travis Cl
- vagrant for platform testing

# **Borg Backup - Status**

- 1.0.12 "oldstable" (last release?)
- 1.1.8 "stable" (ongoing releases)
- "hydrogen" milestone (1.2?):
  - code cleanups / refactorings / drop py34
  - new internal crypto api (AEAD style)
  - new repo compaction handling
- "helium", ... milestones:
  - bigger crypto changes
  - multithreading

### We need more contributors!

- developers (Python, Cython, C)
- testers (alpha/beta/rc, reproduce issues)
- docs maintainers (reST / sphinx)
- community supporters (ML/github)
- security reviewers
- sponsors / donations (via BountySource)

### Links

# github.com/borgbackup github.com/borgbase/vorta

[long vorta screencast]

[borg screencast]

## Questions / Feedback / Meet?

Or use IRC, github issues or the mailing list.

Twitter: @borgbackup, @\_m3nu